# **EXHIBIT** A

REV. RUL. 98-4 TABLE 1

Applicable Federal Rates (AFR) for January 1998

		<u>Annual</u>	<u>Semiannual</u>	<u>Quarterly</u>	Monthly
Short-	Term				
		5.70% 6.28% 6.85% 7.44%	5.62% 6.18% 6.74% 7.31%	5,58% 6,13% 6,68% 7,24%	5.56% 6.10% 6.65% 7.20%
Mid-Te	rm				
110% 1 120% 1	AFR AFR AFR	5.93% 6.52% 7.13% 7.73% 8.95% 10.48%	5.84% 6.42% 7.01% 7.59% 8.76% 10.22%	5.80% 6.37% 6.95% 7.52% 8.67% 10.09%	5.77% 6.34% 6.91% 7.47% 8.60% 10.01%
<u>Long-</u>	Term				
110% 기 120% 기	AFR AFR AFR AFR	6.13% 6.75% 7.38% 8.00%	6.04% 6.64% 7.25% 7.85%	6.00% 6.59% 7.19% 7.77%	5.97% 6.55% 7.14% 7.72%

REV. RUL. 98-4 TABLE 2

Adjusted AFR for January 1998

Period for Compounding

	<u>Annual</u>	<u>Semiannual</u>	<u>Ouarterly</u>	Monthly
Short-term adjusted AFR	3.86%	3.82%	3.80%	3.79%
Mid-term adjusted AFR	4.30%	4.25%	4.23%	4.21%
Long-term adjusted AFR	5.10%	5.04%	5.01%	4.99%

REV. RUL. 99-2 TABLE 1

Applicable Federal Rates (AFR) for January 1999

#### Period for Compounding

		<u>Annual</u>	<u>Ouarterly</u>	Monthly	
Short-Te	erm				
AI 110% AI 120% AI 130% AI	FR	4.57% 5.03% 5.49% 5.97%	4.52% 4.97% 5.42% 5.88%	4.49% 4.94% 5.38% 5.84%	4.48% 4.92% 5.36% 5.81%
Mid-Terr	<u>m</u>				
AI 110% AI 120% AI 130% AI 150% AI 175% AI	FR FR FR FR	4.64% 5.11% 5.59% 6.06% 7.01% 8.19%	4.59% 5.05% 5.51% 5.97% 6.89% 8.03%	4.56% 5.02% 5.47% 5.93% 6.83% 7.95%	4.55% 5.00% 5.45% 5.90% 6.79% 7.90%
Al	FR FR FR	5.21% 5.73% 6.27% 6.79%	5.14% 5.65% 6.17% 6.68%	5.11% 5.61% 6.12% 6.63%	5.09% 5.58% 6.09% 6.59%

REV. RUL. 99-2 TABLE 2

Adjusted AFR for January 1999

	<u>Annual</u>	<u>Semiannual</u>	<u>Ouarterly</u>	<u>Monthly</u>
Short-term adjusted AFR	3.08%	3.06%	3.05%	3.04%
Mid-term adjusted AFR	3 , 86%	3.82%	3.80%	3.79%
Long-term adjusted AFR	4.70%	4.65%	4.62%	4.61%

#### REV. RUL. 2000-1 TABLE 1

### Applicable Federal Rates (AFR) for January 2000

		<u>Annual</u>	<u>Semiannual</u>	<u>Ouarterly</u>	<u>Monthly</u>
Short.	-Term				
110% 120% 130%	AFR	5.88% 6.48% 7.08% 7.68%	5.80% 6.38% 6.96% 7.54%	5.76% 6.33% 6.90% 7.47%	5.73% 6.30% 6.86% 7.42%
Mid-Te	erm				
110% 120% 130% 150% 175%	AFR AFR AFR	6.21% 6.84% 7.47% 8.12% 9.39% 11.00%	6.12% 6.73% 7.34% 7.96% 9.18% 10.71%	6.07% 6.67% 7.27% 7.88% 9.08% 10.57%	6.04% 6.64% 7.23% 7.83% 9.01% 10.48%
Long-	<u> Cerm</u>				
110% 120% 130%	AFR	6.45% 7.11% 7.77% 8.43%	6.35% 6.99% 7.62% 8.26%	6,30% 6.93% 7.55% 8.18%	6.27% 6.89% 7.50% 8.12%

REV. RUL. 2001-3 TABLE 1
Applicable Federal Rates (AFR) for January 2001

#### Period for Compounding

		<u>Annual</u>	<u>Semiannual</u>	<u>Ouarterly</u>	Monthly
Short.	-Term				
110% 120% 130%	AFR	5.90% 6.50% 7.10% 7.71%	5 . 82% 6 . 40% 6 . 98% 7 . 57%	5.78% 6.35% 6.92% 7.50%	5.75% 6.32% 6.88% 7.45%
Mid-Te	<u>erm</u>				
110% 120% 130% 150% 175%	AFR AFR	5.61% 6.17% 6.75% 7.32% 8.47% 9.91%	5,53% 6,08% 6,64% 7,19% 8,30% 9,68%	5.49% 6.03% 6.59% 7.13% 8.22% 9.57%	5.47% 6.00% 6.55% 7.08% 8.16% 9.49%
Long-	<u> Perm</u>				
110% 120% 130% AFR		5.78% 6.37% 6.96% 7.55%	5.70% 6.27% 6.84% 7.41%	5.66% 6.22% 6.78% 7.34%	5.63% 6.19% 6.74% 7.30%

REV. RUL. 2001-3 TABLE 2

Adjusted AFR for January 2001

	<u>Annual</u>	<u>Semiannual</u>	<u>Quarterly</u>	Monthly
Short-term adjusted AFR	4.18%	4 . 14 8	4.12%	4.10%
Mid-term adjusted AFR	4 . 52%	4.47%	4.45%	4.43%
Long-term adjusted AFR	5.24%	5 . 17%	5.14%	5.12%

# **EXHIBIT B**

SELECTED INTEREST RATES

H.15 (519)

For immediate release December 17, 2001

FRD: H.15 Release--Selected Interest Rates-- December 17, 2001

Selected Interest Rates

o Selected Interest Rates

o Release Date: December 17, 2001



Current release Other formats: Screen reader | ASCII | PDF (16 KB) Release dates | Daily update | Historical data | About

1-month	Eurodollar deposits (London) 3 8	6-month	3-month	1-month	CDs (secondary market) 3 7	3-month	2-month	1-month	Financial	3-month	2-month	1-month	Nonfinancial	Commercial paper 3 4 5 6	Federal funds (effective) 1 2 3	Instruments			Yields in percent per annum
1.85		1.87	1.81	1.86		1.78	1.77	1.78		1.75	1.75	1.76			1.90	10	Dec	2001	
1.83		1.77	1.78	1.84		1.76	1.77	1.77		1.72	1.72	1.76			1.80	<b>├</b> ~+	Dec	2001	
1.83		1.82	1.76	1.82		1.73	1.73	1.76		1.72	1.71	1.76			1.81	12	Dec	2001	
1.85		1.84	1.74	1.83		1.74	1.75	1.76		1.72	1.78	1.75			1.86	13	Dec	2001	
1.85		1.89	1.81	1.85	•	1.77	1.77	1.80		1.74	1.73	1.79			1.88	<u>рт</u> Д	Dec	2001	
1.84		1.84	1.78	1.84	1	1.76	1.76	1.77		1.73	1.74	1.76			1.88	11 4	Dec		
1.96		1.93	1.88	1.98	) )	1.87	1.87	1.89		85	1.84	1.91	; ;		2.02	7	Dec	Ending	
2.06		2.03	2.03	2.08	) }	2.00	2.02	2.04		1.97	2.00	2.03	) )		2.09		Nov	2001	

FRB: H.15 Release--Selected Interest Rates-- December 17, 2001

convenitional morehabes to	cate & local bonds 14	Baa	a 13	-	Ø.	30-year	10-year	7-year	5-year	4-year	3-year	2-year	l-year	Interest rate swaps 12	30-year	20-year	10-year	7-year	5-year	3-year	-уеа	1-year	6-month	3-month	1-month	Treasury constant maturities 11	6-month	3-month	4-week	Treasury bills (secondary market) 3 4	U.S. government securities	ndow	Bank prime loan 2 3 9	6-month	3-month
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	, n C	7,81	6.9			. 7	, N	9	4.57	'n	ω	· 2	4		5.12	'n	თ	, 	.9	N	. 7	• <del>إسا</del>	. 9	. 9	·		1.88	ω	. 6			ŲΠ	*	. 0	

Revised to include the rate for December 7, which was 6.88 percent. Please see footnote 13. See overleaf for footnotes

# EXHIBIT C

## BENEFIT PLAN STATEMENTS FILED WITH PWBA

In 2002, the Company submitted reports on Benefit Plans to the Pension and Welfare Benefits Administration, an agency of the Department of Labor. These 2001 Summary Annual Reports provide you with an outline of the financial status of the Pension & Retirement Plan, Group Life Insurance Plans, Medical Care Plan, Dental Assistance Plan, and Vision Care Plan.

## SUMMARY ANNUAL REPORT FOR THE DUPONT PENSION AND RETIREMENT PLAN

This is a summary of the annual report for DuPont Pension and Retirement Plan, EIN 51-0014090, plan #001, for the plan year ending December 31, 2001. The annual report was filed by October 15, 2002 with the Pension and Welfare Benefits Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

#### **Basic Financial Statement**

Benefits under the plan are provided by a trust. Plan expenses were \$1,266,540,114. These expenses included \$39,727,721 in administrative expenses and \$1,226,812,393 in benefits paid to participants. A total of 154,379 persons were participants in or beneficiaries of the plan at the end of the plan year, although not all of these persons had yet earned the right to receive benefits.

The value of plan assets, after subtracting liabilities of the plan, was \$15,254,904,592 as of December 31, 2001, compared to \$16,959,542,736 as of January 1<sup>st</sup>, 2001. During the plan year the plan experienced a decrease in its net assets of \$1,704,638,144. This decrease includes plan transfers as well as unrealized appreciation or depreciation in the value of plan assets; that is, the difference between the value of the plan's assets at the end of the year and the value of the assets at the beginning of the year or the cost of assets acquired during the year.

The plan had transfers out of \$65,018,811. The plan had total income loss of \$373,079,219, all of which was a loss from investments.

#### Minimum Funding Standards

An actuary's statement shows that the plan's assets exceed the minimum funding standards of ERISA, and therefore no company contributions were made in 2001.

## SUMMARY ANNUAL REPORT FOR THE DUPONT GROUP LIFE INSURANCE PLANS

This is a summary of the annual report for the DuPont Contributory and Noncontributory Group Life Insurance plans EIN 51-0014090, plan #501 for plan year, ending December 31, 2001. The annual report was filed by October 15, 2002 with the Pension and

Welfare Benefits Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

#### Insurance Information

The plan has contracts with the Prudential Financial to pay all death and disability claims under the terms of the plan in effect at the time the claim was incurred. The total premiums paid for the plan year ending December 31, 2001 were \$99,051,446.

Because one of these contracts is a so-called experience-rated contract, the premium costs are affected by, among other things, the number and size of claims. Of the total insurance premiums paid for the plan year ending December 31, 2001, the premiums paid under such "experience- rated" contracts were \$86,978,301 and the total of all benefit claims paid under these experience-rated contracts during the plan year was \$69,146,135.

### SUMMARY ANNUAL REPORT FOR THE DUPONT MEDICAL CARE PLAN

This is a summary of the annual report for the DuPont Medical Care Coverage Policy, EIN 51-0014090, plan #502 for plan year ending December 31, 2001. The annual report was filed by October 15, 2002 with the Pension and Welfare Benefits Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

DuPont has committed itself to pay certain medical claims under the terms of the plan in effect at the time the claim was incurred.

#### Insurance Information

The plan has contracts with insurance carriers and health maintenance organizations to pay certain medical claims under the terms of the plan in effect at the time the claim was incurred. The total premiums paid for the plan year ending December 31, 2001 were \$2,254,086.

#### Additional Information

The company also reimburses several other carriers for health claims and related expenses paid under the terms of the plan in effect at the time the claim was incurred. This information is not required to be included in the annual report filed with the IRS. For the plan year ending December 31, 2001, the amount paid under these contracts was \$546,804,569.

# **EXHIBIT D**

#### LEXSEE 2003 U.S. DIST LEXIS 3530

## IPPV ENTERPRISES, LLC and MAAST, INC., Plaintiff, v. ECHOSTAR COMMUNICATIONS CORP., NAGRAVISION, S.A. and NAGRASTAR, L.L.C., Defendant.

Civil Action No. 99-577-KAJ

#### UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

2003 U.S. Dist. LEXIS 3530

February 27, 2003, Decided

PRIOR HISTORY: IPPV Enters v. Echostar Communs. Corp., 106 F. Supp. 2d 595, 2000 U.S. Dist. LEXIS 10776 (D. Del., 2000)IPPV Enters., LLC v. Echostar Communs. Corp., 146 F. Supp. 2d 498, 2001 U.S. Dist. LEXIS 9024 (D. Del., 2001)

**DISPOSITION:** [\*1] Motion for prejudgment interest granted. Motion for costs, expenses, and attorney fees denied. Motions for entry of judgment granted. Motion for reconsideration of Markman opinions denied.

#### LexisNexis(R) Headnotes

COUNSEL: James D. Heisman, Esquire, Connolly, Bove, Lodge & Hutz LLP, Wilmington, Delaware; Frederick G. Michaud, Jr., Esquire, Samuel C. Miller, III, Esquire, David M. Schlitz, Esquire, Lloyd S. Smith, Esquire, and Mark R. Kresloff, Esquire, Burns, Doane, Swecker & Mathis, L.L. P., Alexandria, Virginia; counsel for plaintiffs.

Donald F. Parsons, Jr., Esquire and Rodger D. Smith, Esquire, Morris, Nichols, Arsht & Tunnell, Wilmington, Delaware; Philip L. Cohan, Esquire, John C. Dougherty, Esquire, Hugh J. Marbury, Esquire, James M. Heintz, Esquire, Piper Marbury Rudnick & Wolfe LLP, Washington, DC; counsel for defendants.

JUDGES: JORDAN, District Judge.

**OPINIONBY:** Jordon

OPINION: [\*2]

MEMORANDUM OPINION

February 27, 2003 Wilmington, Delaware

JORDAN, District Judge

#### I. INTRODUCTION

This opinion addresses six outstanding post-trial motions pending before the Court in this case: (1) plaintiff IPPV Enterprises LLC's motion for prejudgment interest (D. I. 221); (2) its motion for costs, expenses, and attorney fees (D. I. 222); (3) its motion for entry of judgment (D. I. 224); (4) its motion for judgment as a matter of law that defendants EchoStar Communication Corp., NagraVision, S. A., and NagraStar, L.L.C. (collectively, "defendants") literally infringe claim 4 of U.S. Patent No. 4,225,884 (issued Sept. 30, 1980) (the '884 patent) (D. I. 226); (5) plaintiff IPPV Enterprises LLC's and plaintiff MAAST, Inc.'s motion for reconsideration of the Court's Markman n1 opinion relating to U.S. Patent No. 4,600,942 (issued Jul. 15, 1986) (the '942 patent) (D. I. 225); and (6) defendants' motion for entry of judgment on the '942 patent (D. I. 228).

n1 Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc), aff<sup>c</sup>d, 517 U.S. 370, 134 L. Ed. 2d 577, 116 S. Ct. 1384 (1996).

[\*3]

#### II. BACKGROUND

IPPV Enterprises, LLC ("IPPV"), a Nevada limited liability corporation, has its principal place of business in Reno, Nevada and is the assignee of the '884 patent, as well as U.S. Patents Nos. 4,163,254 (issued Jul. 31, 1979) (the '254 patent), 4,528,589 (issued Jul. 9, 1985) (the '589 patent), and 4,484,217 (issued Nov. 20, 1984) (the '217 patent). (D. I. 189 at 1.) MAAST, Inc. ("MAAST"), a Delaware corporation, has its principal place of business in Spark, Nevada and owns the 942

patent. (Id.) It also has an ownership interest in IPPV. (D. I. 280 at 1.) All of the patents involved in this case relate to the encryption and decryption of pay-per-view television broadcasts. (Id.)

Defendant EchoStar Communications Corp. ("EchoStar"), a Nevada corporation, has its principal place of business in Littleton, Colorado. EchoStar operates the DISH Network, a direct broadcast satellite subscriber service that transmits signals in digital format to paying customers (id.) using a secure encryption process (D. I. 280 at 1). The signals are then decrypted at the subscriber location for viewing (Id.) Defendant NagraVision, S.A. ("NagraVision"), a Swiss corporation with [\*4] its principle place of business in Cheseaux, Switzerland, and defendant NagraStar LLC ("NagraStar"), a Colorado limited liability corporation, supply EchoStar with technology used in the DISH Network satellite receivers. (Id. at 2.)

On August 26, 1999, IPPV and MAAST initiated this patent infringement case, alleging infringement of the '254, '884, '589, '217, and '942 patents by EchoStar. (D. I. 1.) EchoStar, on December 28, 1999, answered the complaint and asserted affirmative defenses. (D. I. 20.) Plaintiffs thereafter amended their complaint to add NagraVision and NagraStar as defendants, alleging that they contributorily infringed the '217 and '942 patents. (D. I. 60.) EchoStar, NagraVision, and NagraStar then collectively answered plaintiffs' amended complaint on August 24, 2000 and asserted counterclaims. (D. I. 68.)

The Court issued two separate *Markman* opinions, dated July 28, 2000 and July 3, 2001, construing the contested language in the patents at issue. n2 (D. I. 62, D.I. 189.)

n2 The Court's first Opinion (D. I. 62) was directed to resolving a discovery dispute between the parties and was limited to a construction of the phrase "television program signal" as found in the '942 patent. (Id.)

[\*5]

Following the Court's claim construction of the '942 patent, the defendants made a motion with regard to that patent for summary judgment of non-infringement. (D. I. 76-2.) The Court denied that motion (D. I. 93) but, during a July 5, 2001 pre-trial conference, MAAST conceded that, unless the Court reconsidered the claim construction of the '942 patent, the defendants were entitled to an award of summary judgment of non-infringement of that patent. (D. I. 280 at 3-4.) Infringement of the '942 patent was thus not an issue at trial. (Id. at 4.)

The case went to trial in July of 2001, and, after five days of evidence and argument, the jury found that (1) EchoStar's accused products literally infringe claims 8 and 9 of the '254 patent, and also infringe claim 4 of the '884 patent under the doctrine of equivalents; (2) the '217 patent is not invalid; (3) each defendants' infringement was willful; and (4) a "bundled" damages award of fifteen million dollars should be awarded n3 (Id. at 4-5.)

n3 The Court reduced that award to 7.322 million dollars (D. I. 280 at 73-91, D.I. 281) and IPPV accepted (D. I. 282) that reduction rather than retrying the case.

[\*6]

III. DISCUSSION

A. Plaintiff IPPV's Motions

1. Motion For Prejudgment Interest

Pursuant to 35 U.S.C. § 284 n4, IPPV moves the Court for prejudgment interest on the jury's award of damages. (D. I. 221.) IPPV suggests that the Court award prejudgment interest "at the prime rates during the years in question, compounded quarterly[]" based on "spread out ... [bundled license] payments ... from Echostar's launch in March 1996 to September 1997 when the '884 patent expired." (D. I. 288 at 3-6.)

n4 Section 284 provides in pertinent part: Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

For their part, defendants argue that IPPV is not entitled to prejudgment interest in this case due to its "ambushing" the defendants with a new damages theory [\*7] during trial and because of IPPV's delay in bringing suit, despite its awareness of the defendants' infringement. (D. I. 284 at 3-5.) In the alternative, defendants assert that, if the Court awards IPPV prejudgment interest, the appropriate figures should be calculated based on the Treasury Bill rate in effect during the period in question and payments should be spread out "over the lifetime of the '217 patent[]" which would spread payments out through the expiration of the '217 patent on May 11, 2002 since the

'217 patent would have been part of the hypothetical license negotiations on which the award of damages in the case is predicated n5 (ld at 5-7.)

n5 The Court on March 27, 2002, determined that the '217 patent was invalid. (D. I. 280 at 54-66, D.I. 281.) IPPV asserts, therefore, that payments should not be based on the life of this patent since damages should be calculated based on the life of the "longest remaining patent[,]" the '884 patent. (D. I. 288 at 3-4.)

The Supreme Court stated in [\*8] General Motors Corp. v. Devex Corp. that prejudgment interest should ordinarily be awarded in patent infringement cases pursuant to Section 284 where necessary to fully compensate patent owners for losses resulting from infringement, "absent some justification for withholding such an award[]" such as when "the patent owner was responsible for undue delay in prosecuting the lawsuit[]" or when "other circumstances" exist warranting the withholding of such an award. n6 461 U.S. 648, 655-57, 76 L. Ed. 2d 211, 103 S Ct. 2058 (1983). The Court in Devex did not define "undue delay" and provided little guidance as to the "other circumstances" justifying a denial of prejudgment interest Id. The Court did state, however, that an "award of prejudgment interest will only be set aside if it constitutes an abuse of discretion." Id. at 657.

n6 An award of prejudgment interest typically "extends from the date of infringement to the date of judgment." Honeywell Intern., Inc. v. Hamilton Sundstrand Corp., 166 F. Supp. 2d 1008, 1041 (D. Del. 2001).

#### [\*9]

The Federal Circuit in Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc. held that delay alone does not constitute a reason for denying a patent owner prejudgment interest, absent prejudice to the defendants. 246 F. 3d 1336, 1361-62 (Fed. Cir. 2001) (quoting Lummus Indus., Inc. v. D.M. & E. Corp., 862 F.2d 267, 275 (Fed. Cir. 1988). While it does not follow that prejudice to a defendant is a sine qua non of the denial of prejudgment interest, prejudice clearly is an important factor to consider any time there is an argument that an award of interest is inappropriate.

"The Federal Circuit has given district courts great discretion" when determining the applicable interest rate for an award of prejudgment interest. Phillips Petroleum Co. v. Rexene Corp., 1997 U.S. Dist LEXIS 18459, No. Civ. A. 90-208-LON, 1997 WL 781856, \*28 (D. Del. Sept. 4, 1997). (citations omitted). Courts sometimes apply a prejudgment interest rate based on the prime rate, to account for the cost of borrowing money. See C.R. Bard, Inc. v. Medtronic, Inc., 1999 U.S. Dist. LEXIS 9875, C.A. No. 96-589-SLR 1999 WL 458305, \*15 (D. Del. June 15, 1999), aff'd in part and vacated [\*10] in part on other grounds, 250 F 3d 760 (Fed. Cir. 2000); Mars, Inc. v Conlux USA Corp., 818 F. Supp. 707, 720-721 (D. Del. 1993), aff'd, 116 F.3d 421 (Fed. Cir. 1993). At other times, courts use the Treasury Bill rate prescribed by the statute authorizing post-judgment interest, 28 U.S.C. § 1961. See, e.g., Laitram Corp. v. NEC Corp., 115 F.3d 947 (Fed. Cir. 1997); Phillips, 1997 U.S. Dist. LEXIS 18459 at \*28-29; Joy Technologies, Inc. v Flakt, Inc., 954 F. Supp. 796, 808 (D. Del. 1996).

The defendants have not demonstrated that IPPV should be denied prejudgment interest. The three primary reasons they advance for a denial of prejudgment interest are that IPPV delayed filing suit, that IPPV ambushed the defendants during trial by introducing a new damages theory near the close of trial, and that the jury's award made IPPV whole. (D. I. 284 at 3-6.) As to the first two reasons, the defendants have not persuaded the Court that, even if their allegations are true, they have suffered such undue prejudice as to warrant a denial of prejudgment interest. In fact, the Court, cognizant of IPPV's shift [\*11] in damages theory, reduced the jury's initial award of damages by nearly half (see D.I. 280 at 73-91, D.I. 281), and the alleged delay in IPPV's bringing suit does not effect the "hypothetical" licensing agreement upon which damages were awarded because those negotiations are based on life of the patents infringed, a fact unaffected by the timing of a lawsuit. (See id.) Finally, the defendants offer nothing but their bare assertion to support the argument that the jury award is sufficient without prejudgment interest. As already noted, that assertion is counter to controlling authority stating that prejudgment interest ordinarily should be awarded. Devex, 461 U.S. at 655-57.

The Court is satisfied that the appropriate prejudgment interest rate should be an average of the short term prime lending rates for the period beginning March 1996 and concluding in September 1997, which represents the period that the "hypothetical" license would have encompassed n7 Cf. Mars, Inc., 818 F. Supp at 721 ("The cost of borrowing money--and not the rate of return on investing money--provides a better measure of the harm Mars suffered as a result of the loss [\*12] of the use of money over time.") Accordingly, the Court awards prejudgment interest to be paid at the average of the short term prime

lending rates from March 1996 through September 1997, on seven quarterly payments of 1.046 million dollars beginning in March 1996 and concluding in September 1997, with interest to be compounded annually from the date of infringement to the date of entry of judgment. That interest calculation will adequately compensate for

the lost use of royalties which should have been paid.

n7 September 1997 was the expiration date of the '884 patent, which the Court accepts as the appropriate end date for the quarterly license payments.

#### 2. Motion For Costs Expenses And Attorney Fees

IPPV moves the Court pursuant to 28 U.S.C. § 1927 for costs, expenses, and attorneys' fees. n8 (D. I. 222.) Section 1927 is designed to remedy abuses of the judicial process. Hackman v Valley Fair, 932 F.2d 239, 242 (3d Cir. 1991). n9 In Williams v. Giant [\*13] Eagle Markets. Inc., the Third Circuit held that a Section 1927 award is warranted when an attorney acted with willful bad faith. 883 F.2d 1184, 1191 (3d Cir. 1989) (citing Baker Indus v. Cerberus ltd., 764 F.2d 204, 209 (3d Cir. 1985)). In Baker, the Third Circuit explained that the imposition of Section 1927 sanctions should not have the effect of "chilling an attorney's legitimate ethical obligation to represent his client zealously." 764 F.2d at 208. Moreover, explained the Court, "the power to assess the fees against an attorney should be exercised with restraint lest the prospect thereof chill the ardor of proper and forceful advocacy on behalf of his client." Id. (quoting Colucci v. New York Times Co., 533 F. Supp. 1011, 1014 (S. D.N.Y. 1982)); see also Williams, 883 F.2d at 1193 (imposing sanctions even in a case in which a lawyer raises an obviously losing theory "would deprive a lawyer of his ethical obligation to represent his client zealously."). Thus, a mere failure on the part of a party to succeed on a contention is not tantamount to bad faith or vexatious litigation. See Colluci, 533 F. Supp. at 1014. [\*14] However, once bad faith is established, the imposition of sanctions is soundly within the discretion of the Court. Ford v. Temple Hosp., 790 F.2d 342, 347 (3d Cir. 1986).

> n8 Section 1927 provides that: Any attorney or other person admitted to conduct cases in any court of the United States or any Territory thereof who so multiplies the proceedings in any case unreasonably and vexatiously may be required by the court to satisfy personally the excess costs,

expenses, and attorneys' fees reasonably incurred because of such conduct.

n9 The law of the regional circuit applies to a request for sanction under section 1927 in a patent infringement case. See Seal-Flex, Inc. v. Athletic Track and Court Construction, 172 F.3d 836, 845 (Fed. Cir. 1999).

IPPV alleges that defendants acted in bad faith because the defendants' attorneys failed to concede many issues ultimately not disputed at trial. (D. I. 239 at 7-8.) IPPV contends that the defendants had the opportunity to notify [\*15] IPPV of uncontested issues but failed to do so. (Id.)

Defendants counter IPPV's contentions by arguing, in essence, that there is nothing improper in holding a plaintiff to its proof. (D. I. 256 at 12-14.) Moreover, contend the defendants, there is simply no basis in the record for IPPV's argument that they acted in bad faith by concluding prior to trial not to contest certain issue but deciding not to concede those issues either. (Id. at 15-16.) In fact, they argue the opposite is true: they were at all times reevaluating "all aspects of the trial" and were merely preserving the right to "emphasize[] the difference between plaintiff's view of the case and defendant's view ...." (Id. at 16-17.) By not pursuing certain issues, they say, they shortened rather than extended the trial. (Id. at 18.)

The Court, after considering the totality of the evidence before it, finds that IPPV has not established that the defendants conduct in this case amounts to bad faith sanctionable under Section 1927. Accordingly, plaintiff's motion for costs, expenses, and attorneys' fees (D. I. 222) pursuant to Section 1927 is denied.

#### 3. Motion For Judgment On The Verdict

IPPV moves [\*16] the Court for entry of judgment based on the July 13, 2001 jury verdict. (D. I. 224.) The Court has yet to enter a verdict because there existed a potential issue of inequitable conduct in the prosecution of the patents involved in this case. (D. I. 229-34 at 804-05.) Since trial concluded, however, defendants have not pursued that issue. The time has past for such a motion and it is appropriate for the Court to consider IPPV's request for entry of judgment (D. I. 224). Defendants' oppose the motion as premature, arguing pursuant to Federal Rule of Civil Procedure 54(b) n10 that the Court should not enter a judgment on the verdict until a judg-

ment can be rendered with regard to all of the patents involved in this lawsuit. n11 (D. I. 251 at 1-2, PP 1-6.)

n10 Rule 54(b) provides, in pertinent part, "when more than one claim for relief is presented in an action or when multiple parties are involved, the court may direct the entry of a final judgment as to one or more but fewer than all of the claims or parties only upon an express determination that there is no just reason for delay and upon an express direction for the entry of judgment."

[\*17]

n11 Defendants also opposed the motion on the ground that a number of its post-trial motions remained outstanding. (D. I. 251 at 2, P6.) With the filing of this Opinion, however, those motions are no longer still pending.

In this case, the '254, '884, and '217 patents were tried to the jury. The '589 and '942 patents were not. Plaintiffs dropped their allegations of infringement of the '589 patent. (See D.I. 280 at 2.) Because the Court in this opinion will completely dispose of the remaining issues in the case regarding the '942 patent, there exists no impediment to the entry of judgment and an analysis under *Rule 54(b)* is unnecessary. The Court will issue an Order entering judgment.

- 4. Motion For Judgment As A Matter of Law That Defendants Literally Infringe Claim 4 of The '884 Patent
  - a. The Parties' Arguments

On July 25, 2001, IPPV moved pursuant to Federal Rule of Civil Procedure 50(b) for judgment as a matter of law that defendants literally infringed claim 4 of the '884 patent n12 (D. I. 226.) At the conclusion of trial, the jury found that the defendants did not [\*18] infringe claim 4 literally but that they did infringe under the theory of equivalents. IPPV challenges that finding, arguing that the jury should have found that the defendants literally infringed the claim. (D. I. 235.)

n12 Claim 4 of the '884 patent provides: 4. In a pay television system, a method of providing subscriber control over television programs which can be viewed at the subscriber location comprising the steps of: transmitting from a remote location a scrambled television program signal; inserting a category identification signal into the scrambled program signal at the remote location for transmission thereof with the program signal; receiving the scrambled program signal, including the category identification signal, at the subscriber location; generating a signal at the subscriber location identifying at least one category of programs which are acceptable for viewing; comparing the received category identification signal with the generated signal; and enabling the received program signal to be unscrambled if the compared signals correspond. 1884 patent at cols. 11-12, ll. 59-10.

#### [\*19]

In particular, IPPV asserts that the jury incorrectly determined that the defendants' accused products did not literally infringe the "step of inserting a category identification signal into the scrambled program signal at the remote location for transmission thereof with the program signal" (hereinafter the "inserting ... into" step), as found in claim 4 of the '884. IPPV bases its argument on the Court's July 3, 2001 Opinion (D. I. 189), in which the Court stated that program signals usually comprise a video signal, an audio signal and other signals and codes (D. I. 235 at 1-4.) IPPV asserts that, given the Court's statement about program signals in its July 3, 2001 Opinion, defendants' system must literally infringe the "inserting ... into" step, as a matter of law, because defendants' system transmits an SI packet (an "other" signal or code) containing a private rating descriptor with its program signal, therefore, a private rating descriptor is inserted into the television program stream via the SI packet, n13 (Id. at 4-6.)

n13 The Court construed "inserting ... into" step as requiring that the identification signal "be placed inside of the program signal." (D. I. 189 at 46-47.)

#### [\*20]

Defendants, in contrast, argue that IPPV is asserting an erroneous construction of "television program signal." (D. I. 253 at 5-6.) They contend that even assuming IPPV's definition of "television program signal" is adopted, IPPV is still not entitled to judgment as a matter of law because defendants' "private rating descriptor is not necessary to process the television program signal and, therefore, is not part of the television program signal as defined by plaintiff." (Id. at 5-6.)

b. Applicable Standard Of Review

A court may render judgment as a matter of law on an issue at any time during a jury trial before the case is submitted to the jury, if a party has been fully heard on the issue and "there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue[] ...." Fed. R. Civ. P. 50(a). A party may renew a Rule 50(a) motion after the case is submitted to the jury, at which point, under Rule 50(b), the Court has three options, assuming the jury has returned a verdict: the Court may "(A) allow the judgment to stand, (B) order a new trial, or (C) direct entry of judgment as a matter of law .... " Fed. R. Civ. P. 50(b)(1).

The [\*21] Court should grant a motion for judgment as a matter of law only if the evidence, when viewed in the light most favorable to the nonmoving party, demonstrates that "there is no question of material fact for the jury and any verdict other than the one directed would be erroneous under the governing law." Beck v. City of Pittsburgh, 89 F.3d 966, 971 (3d Cir. 1996) (quoting Macleary v. Hines, 817 F.2d 1081, 1083 (3d Cir. 1987)); see also Embrex, Inc. v. Service Eng'g Corp., 216 F.3d 1343, 1347 (Fed. Cir. 2000). Stated differently, the party moving for a judgment as a matter of law notwithstanding the jury's verdict must demonstrate that the jury's findings were not supported by substantial evidence, or if they were, that, as a result of the legal conclusions derived from the jury's findings, the jury's verdict cannot stand under the applicable law. Applied Med. Res. Corp. v. United States Surgical Corp., 147 F.3d 1374, 1376 (Fed. Cir. 1998); Read Corp. v. Portec, Inc., 970 F.2d 816, 821 (Fed. Cir. 1992). The Supreme Court has defined "substantial evidence" as "such relevant evidence as a reasonable [\*22] mind might accept as adequate to support a conclusion." Richardson v. Perales, 402 U.S. 389, 390, 28 L. Ed. 2d 842, 91 S Ct. 1420 (1971). It is less than a preponderance of evidence and more than a mere scintilla. Id.

#### c. Analysis

The Court in its prior two Markman opinions (D. I. 62, 189) did not construe the phrase "scrambled program signal" as found in claim 4 of the '884 patent. (See D.I. 189 at 41.) The Court did, however, in its July 28, 2000 Opinion (D. I. 62), construe the phrase "television program signal" in claim 21 of the '942 patent to mean an "analog television program signal." (Id. at 24.) The Court also, in its July 3, 2001 Opinion (D. I. 189), held that a "television program signal," as found in the '942 patent, "comprises audio and video signals that are broadcast simultaneously to produce the sound and picture portions of a televised scene." (Id. at 48-49.)

In a March 27, 2002 post-trial Opinion (D. I. 280) addressing a similar judgment as a matter of law motion filed by the defendants (D. I. 227), the Court stated that:

> Because the parties never disputed the term "scrambled television program signal" before trial, that term was not addressed before the [\*23] outset of the trial. As the trial progressed, it became apparent that for the '254 and '884 patents, the key claim term at issue was not merely "television signal" or "television program signal," but "scrambled television program signal." Because of the timing, the court elected to treat the parties disputes regarding this term as an issue that could be decided by the jury based on examining the claims, examining the court's definition of "television signal," applying their own understanding of the word "scrambled" based on the evidence before them and arguments made to them by the parties.

> It is clear from the verdict form that the jury weighed the evidence and determined that defendant's transport stream was a "scrambled television program signal," and therefore satisfied that element of the claims. Based on the jury instructions, the evidence set forth by plaintiff's expert, and the court's claim construction of the term "television signal," the jury reasonably, and, in the opinion of the court, correctly determined that while a television program signal may only contain audio and video, a scrambled television program signal must contain, in addition to audio and video, [\*24] codes that allow for the unscrambling of the data. (D. I. 280 at 45-46.)

After making those comments, the Court denied the defendants' motion (D. I. 227), stating that the "jury properly considered the claim term 'scrambled television program signal ..." because "there was substantial evidence from which the jury could determine that, under the doctrine of equivalents, the Echostar DISH Network inserts a category identification signal into the scrambled television signal." (Id. at 48-49.) The Court went on to reason that its definition of:

> "inserting into" does not mandate that the codes [identification codes] must be inserted into a particular portion of the

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television signal. They do not have to be inserted directly into a video packet or directly into an audio packet; it is sufficient for the category identification code to be placed between the other components that make up the scrambled television signal. (Id. at 49-50.)

The Court then stated that "collectively, these packets, broadcast on the same carrier, make up the audio, video, and other signals and codes associated with the program signal that enable the television programs to be viewed [\*25] at the subscriber location." (Id. at 50.) The Court also discussed the doctrine of equivalents and stated that it was "unsurprising" that "the jury resorted to the doctrine of equivalents to determine whether certain claim limitations are met ... "because "the disclosures of the patented methods were focused on continuous analog signals and not digital broadcasts [such as the accused systems] that use packets of information." (Id. at 51.)

IPPV now argues that the Court should disturb the jury's finding that the "inserting ... into" step of claim 4 of the '884 patent was infringed under the doctrine of equivalents. Essentially, plaintiff, in its post-trial briefing asks the Court to revisit its prior decision (D. I. 280) by adding, in the Markman claim construction mix, the word "scrambled" to the phrase "television program signal." (See D.I. 265.) IPPV asks the Court to take that step even though the parties had previously contented themselves with the Court's construction of the phrase "television program signal" and despite the Court's holding that the jury correctly considered the meaning of the phrase "scrambled television program signal" as instructed by the Court. [\*26] (See D.I. 280 at 42-49.) IPPV also makes its application after the Court held, in denying defendants' similar motion, that the jury had substantial evidence to support a finding of infringement under the doctrine of equivalents. (Id. at 48-49.)

The Court again declines to disturb the jury's findings. The Court dealt specifically with the phrase "scrambled program signal" at trial, giving each party the opportunity to argue the point. (D. I. 280 at 37-54.) Having satisfied itself that the parties were content on a proposed method for moving forward and instructing the jury so as to reach a verdict in the case, the Court instructed the jury and proceeded to allow the parties to argue their theories as to whether the accused devices literally infringe claim 4 of the '884 patent (Id. at 42.) The jury was given an adequate framework within which to render a finding that the accused systems did or did not literally infringe the "inserting ... into" step. The jury was also properly instructed on the test for equivalency and had ample facts before it relating to infringement. IPPV was given a full opportunity to address the phrase "scrambled program signal" when arguing its case to the [\*27] jury.

The Court holds that the jury's finding that there was no literal infringement but that there was infringement under the doctrine of equivalents was supported by substantial evidence and was not the result of the legal error. IPPV's motion is therefore denied.

B. IPPV's and MAAST's Motion For Reconsideration Of The Court's Markman Opinion Relating To The '942 Patent

On July 25, 2001, plaintiffs moved the Court to reconsider its July 3, 2001, Markman Opinion (D. I. 189) construing the claims of the '942 patent. In particular, plaintiffs ask the Court to reconstrue "television program signal," "encrypting," "with," "providing," and "utilizing said decode control key and said transmitted control signal" as found in the claims of the '942 patent, n14 (D. I. 225.) Defendants, of course, oppose any reconstruction of the claims of the '942 patent. (D. I. 248.)

> N14 Plaintiffs limited their argument in their brief to the phrase "television program signal" and the word "encrypting." (D. I. 236 at 2.) However, the Court's analysis applies to all of the '942 claim language plaintiffs moved the Court for a reconstruction.

#### [\*28]

The Court first addressed the parties' contentions with regard to the phrase "television program signals" on July 28, 2000, holding that the phrase means "analog television program signal." (D. I. 62 at 24.) Subsequently, the parties requested the Court to reconsider its construction of this phrase. (D. I. 76, 84.) On December 11, 2000, the Court heard argument on that request (see D.I. 101) but declined to modify its earlier construction. (D. I. 93.)

In June 2001, the parties submitted their opening claim construction briefs addressing the remaining disputed '942 patent claim language (D. I. 156, 157.) On July 3, 2001, the Court issued its Markman claim construction of the '942 patent claims, (D. I. 189.) In that Opinion, the Court reiterated its construction of "television program signal" and construed, for the first time, "encryption," "with," "providing," "control signal," "decode signal," and "transmitting" or "transmit" as found in the '942 patent. (Id. at 47-62.) Plaintiffs then, during a July 5, 2001 pre-trial conference, conceded that under the Court's claim construction of the '942 patent, the defendants

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were entitled to an award of summary judgment with regard [\*29] to that patent. The Court, in response, stated that infringement of the '942 patent was not an issue for trial. (D. I. 195 at 11-14.)

Plaintiffs now, for a second time, request the Court to revisit its construction of the '942 patent (D. I. 62, 189). They argue that the Court erroneously construed the word "encryption" as having no established plain meaning when, in actuality, the word is readily understood (Id. at 3-10). They assert further that, since the word is used consistently throughout the '942 specification, a broad meaning should be applied and the Court should not have construed the word to exclude the method of inversion discussed in the written description and understood in the field of art pertaining to the invention. (Id.) As to the phrase "television program signal," plaintiffs contend that the Court erred by narrowing the meaning of the phrase by including the limitation that the "television program signal" be "analog," when the patent evidences an intent on the part of the inventors to convey a broad, ordinary meaning for the phrase. (Id. at 10-14.) Defendants, in opposing plaintiffs' arguments, declare that the Court's earlier ruling is correct, and, at any [\*30] rate, the Court should not disturb its earlier ruling since the plaintiffs idly rested on their rights. (D. I. 248 at 4-14)

The plaintiffs' motion to reconsider raises the question of how many bites a party may rightfully expect at the Markman claim construction apple. The answer, at least in this case, is one less than the plaintiffs want. The Court's earlier construction of the '942 patent was and is legally sound. Disturbing that ruling at this late juncture is both unwarranted and unwise. It would also be, not incidentally, out of keeping with the rules of this Court, which provide that "[a] motion for reargument shall be served and filed within 10 days after the filing of the Court's opinion or decision." D. Del. LR. 7.1.5 (emphasis added). The Court entered two separate Markman Opinions in this case (D. I. 62, 189). The first on July 28, 2000 (D. I. 62). The second on July 3, 2001 (D. I. 189). Plaintiffs timely sought reconstruction of the Court's July 28, 2000 construction and lost. Plaintiffs failed to timely seek reconsideration of the Court's July 3, 2001 construction, having filed a request to do so on July 25, 2001 (D. I. 225). Accordingly, plaintiffs' [\*31] motion for reconsideration of the Court's Markman Opinions relating to the '942 patent (D. I. 225) is denied.

#### C. Defendants' Motion

Defendants move the Court pursuant to Federal Rule of Civil Procedure 58 for entry of judgment of noninfringement and invalidity of the '942 patent. (D. I.

228.) In support of such a judgment, defendants offer "their previously filed Motion for Summary Judgment for Non-Infringement of the '942 Patent (D. I. 110-111), Motion for Summary Judgment of Invalidity of the '942 Patent Based Upon the Lee, Guillou and Sechet References (D. I. 134), Judge McKelvie's July 3 Markman opinion (D. I. 189), defendants' July 5, 2001 letter to the Court, and plaintiffs' concessions during the July 5, 2001 pre-trial conference (D. I. 195)." n15 (D. I. 298) (footnotes omitted). As already noted, supra at 4, plaintiffs have acknowledged that, unless the Court reconsiders the construction of "encryption" as found in the claims of the '942 patent, entry of judgment of non-infringement of that patent is warranted. (D. I. 296 at 2.) Plaintiffs argue, however, that the Court should not reach the question of invalidity of the '942 patent, given the Court's [\*32] statements on that topic at the July 5, 2001 hearing, n16 (D. I. 296 at 2.)

> n15 This action was originally assigned within this Court to the Honorable Roderick R. McKelvie. (D. I. 1.) Judge McKelvie retired from the Court in 2002 and the case was referred to Magistrate Judge Mary Pat Thynge (See D.I. 291.) The case was reassigned to the undersigned on January 6, 2002. (D. I. 293.)

> n16 In support of its argument that the Court ruled on the invalidity question, plaintiffs quote the following language from the July 5, 2001 hearing: On the issue of validity, I can think about that, too, except that in the past when I've been presented with this issue, I've reached the conclusion, that I don't reach validity if there is no infringement, and especially if there is no counterclaim for declaratory judgment of invalidity. (D. I. 296 at 2 (quoting D.L. 195 at 11-12).)

The Court has discretion as to whether it will reach the issue of patent invalidity when the issue is raised as an affirmative defense, if the [\*33] dispute giving rise to the issue may be finally disposed of on other grounds. Multiform Desciccants, Inc. v. Medzan, Ltd., 133 F.3d 1473, 1481 (Fed. Cir. 1998) (citing Cardinal Chem. Co. v. Morton Int'l Inc., 508 U.S. 83, 124 L. Ed. 2d 1, 113 S. Ct. 1967 (1993)). The parties both agree that the Court should enter an Order of non-infringement of the '942 patent if the Court does not reconsider its prior construction of "encryption." (See D.I. 296, 298.) The Court has denied plaintiffs' motion to reconstrue the '942 patent (D. I. 225), supra at 16-19. Plaintiff's allegations of infringement of the '942 patent, therefore, are finally decided. Accordingly, the Court in its discretion will not

reach the issue of invalidity of the '942 patent. n17 The Court will issue an order entering judgment of non-infringement of the '942 patent.

n17 The Court also need not address whether Judge McKelvie previously ruled that the Court would not address the issue of invalidity of the '942 patent.

#### IV. CONCLUSION

In summary, [\*34] the Court holds as follows on the various motions: (1) IPPV's motion for prejudgment in-

terest (D. I. 221) is GRANTED; (2) IPPV's motion for costs, expenses, and attorney fees (D. I. 222) is DENIED; (3) IPPV's motion for entry of judgment (D. I. 224) is GRANTED; (4) IPPV's motion for judgment as a matter of law that defendants literally infringe claim 4 of the '884 patent (D. I. 226) is DENIED; (5) IPPV's and MAAST's motion for reconsideration of the Court's Markman opinion relating to the '942 patent (D. I. 225) is DENIED; and (6) defendants' motion for entry of judgment on the '942 patent (D. I. 228) is GRANTED.

An Order will issue.

# **EXHIBIT E**

# Federal Reserve Statistical Release

FRB: H.15 Release--Selected Interest Rates-- March 11, 2002

# Selected Interest Rates

Release Date: March 11, 2002

Current release Other formats: Screen reader | ASCII | PDF (28 KB) Release dates | Daily update | Historical data | About

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See overleaf for footnotes								

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Case 1:98-cv-00061-MPT